Mr. R. P. Powers Senior Vice President Nuclear Generation Group American Electric Power Company 500 Circle Drive Buchanan, MI 49107-1395

SUBJECT: D. C. COOK INSPECTION REPORT 50-315/98030(DRS); 50-316/98030(DRS)

Dear Mr. Powers:

On January 15, 1999, the NRC completed an inspection at your D. C. Cook Units 1 and 2 reactor facilities. The inspection was an examination of activities conducted under your license as they relate to compliance with the Commission rules and regulations and with the conditions of your license. The purpose of the inspection was to review corrective actions for previously identified NRC issues. The inspector concluded that your staff was effective in implementing corrective actions for the notices of violation, notice of deviation, and inspection follow-up items that were reviewed during this inspection. In accordance with 10 CFR 2.790 of the "Rules of Practice," a copy of this letter and the enclosed inspection report will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Original /s/ J. A. Grobe

John A. Grobe, Director Division of Reactor Safety

Docket Nos.: 50-315; 50-316 License Nos.: DPR-58; DPR-74

Enclosure: Inspection Report 50-315/98030(DRS);

50-316/98030(DRS)

See Attached Distribution

R. Powers -2-

cc w/encl: J. Sampson, Site Vice President

M. Rencheck, Vice President, Nuclear Engineering

D. Cooper, Plant Manager

R. Whale, Michigan Public Service Commission Michigan Department of Environmental Quality

Emergency Management Division MI Department of State Police

D. Lochbaum, Union of Concerned Scientists

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DOCUMENT NAME: G:DRS\DCC98030.wpd SEE PREVIOUS CONCURRENCE

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R. Powers -2-

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket Nos: 50-315; 50-316 License Nos: DPR-58; DPR-74

Report Nos: 50-315/98030(DRS); 50-316/98030(DRS)

Licensee: Indiana and Michigan Power

500 Circle Drive

Buchanan, MI 49107-1395

Facility: Donald C. Cook Nuclear Generating Plant

Location: 1 Cook Place

Bridgman, MI 49106

Dates: December 14, 1998 through January 15, 1999

Inspector: G. F. O'Dwyer, Reactor Engineer

Approved by: John M. Jacobson, Chief

Lead Engineering Branch

Report Details

III. Engineering

This inspection involved review of corrective actions relative to NRC identified issues. The inspector reviewed licensee responses, supporting documentation, calculations, and interviewed cognizant licensee personnel.

E8 Miscellaneous Engineering Issues

E8.1 (Closed) Violation 50-315/95005-04; 50-316/95005-04: Inadequate review of valve leak sealant injection calculations.

The inspector verified the corrective actions described in the licensee's response letter, dated May 5, 1995, to be reasonable and complete. No similar problems were identified.

E8.2 (Open) Violation 50-315/95009-03; 50-316/95009-03: Three examples of inadequate post-maintenance testing (PMT).

The inspector verified the corrective actions described in the licensee's response letter, dated October 11, 1995, to be reasonable and complete except in the following aspects. As part of the corrective actions, the licensee had written a component-specific PMT requirements matrix and a controlling procedure requiring the matrix to be used. The licensee identified and documented in Condition Report (CR) 98-3156, initiated July 2, 1998, that plant management had subsequently deleted the requirement to use the matrix which rendered the corrective action ineffective. Without the requirement, the matrix was not consistently used. The licensee identified the requirement deletion as a lack of control of corrective actions. This was another example of the corrective action program problems being tracked by Manual Chapter 0350 Case Specific Checklist Item 2, "Corrective Action Program Breakdown," as listed in enclosure 1 of the letter, dated October 28, 1998, from the NRC to the licensee. Licensee personnel informed the inspector that the matrix will be enhanced and the requirement to use the matrix will be restored to the controlling procedure. The inspector verified that these corrective actions were documented in CR 98-3156. This item can be closed pending verification that the corrective actions have been implemented.

E8.3 (Open) Inspection Followup Item 50-96013-08; 96013-08: The System Operational Performance Inspection team had questions about D. C. Cook Calculation RD-96-02, Revision 0, "Offsite and Control Room Thyroid Doses From Containment Bypass Associated With a Charging Pump in ECCS Mode."

The NRC requested a response to this IFI. The licensee responded in docketed letter, dated April 10, 1998. NRR will assist the region in reviewing the response to ensure that the review criteria will be consistent with that used by NRR to review the licensee's control room dose analysis. NRR requested submittal of the analysis in docketed letter, dated October 28, 1998.

E8.4 (Closed) Deviation 50-315/96013-09; 50-316/96013-09: Deviation from NUREG 0737 commitments for Large Break Loss of Coolant Accident Radiological Analysis.

The inspector verified the corrective actions described in the licensee's response letter, dated March 12, 1997, to be reasonable and complete. No similar problems were identified.

E8.5 (Closed) Violation 50-315/97003-01; 50-316/97003-01: Two complex procedures were not designated as "In-Hand" procedures as required.

The inspector verified the corrective actions described in the licensee's response letter, dated May 5, 1995, to be reasonable and complete. No similar problems were identified.

E8.6 (Closed) Inspection Followup Item 50-315/97023-01; 50-316/97023-01: The licensee identified: 1) failure to train engineers as required, 2) recurrent failures to implement corrective actions, 3) potentially unqualified personnel processing condition reports, and 4) training department corrective action implementation problems.

The first issue of this item was closed by the issuance of non-cited violation (NCV) 50-315/316-98003-01. The violation was not cited because the licensee's proposed corrective actions were evaluated as reasonable and complete. However, the licensee identified and documented in CR 98-7307 initiated on November 24, 1998, that the engineering training program had several problems with some being the same as those stated in the NCV. This condition report demonstrated that the proposed corrective actions for the NCV had not been implemented adequately. This was another example of the corrective action program problems that are already being tracked and addressed by Manual Chapter 0350 Checklist Item 2, "Corrective Action Program Breakdown." The NRC will perform a corrective action program inspection to ensure the remediation of the program before the plant restarts. The engineering training problems documented by CR 98-7307 will be tracked by a new inspection follow-up item (IFI) 50-315/316-98030-01(DRS). All other aspects of this IFI were closed in NRC inspection report 50-315/316-98003. This item is closed.

V. Management Meetings

X1 Exit Meeting Summary

The inspector presented the inspection results to licensee personnel after the conclusion of the inspection on January 15, 1999. The licensee acknowledged the findings presented. No proprietary information was identified by the licensee.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- K. Baker, Engineering
- B. Bradley, Senior Engineer
- #P. Carteaux, Engineering Training Supervisor
- **#D.** Cooper, Plant Manager
- #M. DePuyot, Regulatory Compliance Lead
- #E. Eckstein, Nuclear Engineering
- A. Feliciano, Senior Engineer
- #M. Finissi, Electrical and Auxiliary Systems Engineering Manager
- C. Gilmore, Asst Work Control
- M Greendonner, Protection
- D. Hafer, Plant Engineering Manager
- D. Kosloff, Nuclear Licensing
- B. O'Rourke, Nuclear Licensing
- F. Pisarsky, Performance Engineering
- D. Powell, Plant Engineering
- W. Shafer, Nuclear Licensing
- T. Taylor, Nuclear Licensing
- C. VanderZwaag, Senior Engineer
- T. Zimmerman, Nuclear Engineering

USNRC

- #G. O'Dwyer, Reactor Inspector
- B. Bartlett, SRI
- #J. Maynen, RI
- # Denotes those at the exit on January 15, 1999.

INSPECTION PROCEDURES USED

IP 92903 Followup - Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

ITEMS DISCUSSED		
50-315/95009-03 50-316/95009-03	VIO	Three Examples of Inadequate Post-maintenance Testing
50-315/96013-08	IFI	Questions on a Control Room and Offsite Dose
50-316/96013-08		Calculation
ITEM OPENED		
50-315/98030-01 50-316/98030-01	IFI	Engineering Training Program Problems
ITEMS CLOSED		
50-315/95005-04 50-316/95005-04	VIO	Inadequate Leak Sealant Injection Calculations Reviews
50-315/96013-09 50-316/96013-09	DEV	Deviation from NUREG 0737 Commitments for Loss of Coolant Accident Radiological Analysis
50 045/07000 04		
50-315/97003-01 50-316/97003-01	VIO	Two complex Procedures Were Not Designated Properly

LIST OF ACRONYMS

AEP American Electric Power

AR Action Request

CFR Code of Federal Regulations

CR Condition Report DCC Donald C. Cook

DEV Deviation

DRP Division of Reactor Projects
DRS Division of Reactor Safety

ECCS Emergency Core Cooling System

IFI Inspector Followup Item
IP Inspection Procedure
IR Inspection Report

LOCA Loss of Coolant Accident

MC Manual Chapter

MI Michigan

NCV Noncited Violation NOV Notice of Violation

NRC Nuclear Regulatory Commission
NRR Nuclear Reactor Regulation
PMT Post-maintenance Testing

RI Resident Inspector

SRI Senior Resident Inspector

UFSAR Updated Final Safety Analysis Report

URI Unresolved Item

VIO Violation